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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,374	07/09/2001	Michael J. Geile	100.070US26	6587
34206	7590	06/29/2005		
			EXAMINER	
			CUMMING, WILLIAM D	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/901,374	GEILE, ET AL	
	Examiner	Art Unit	
	WILLIAM D CUMMING	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 April 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Claim Rejections - 35 USC § 103

1. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 2-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Thompson, et al** in view of **Clark, et al.**

Thompson, et al disclose all subject matter, note paragraph 2 of the Office action dated January 21, 2004, except expressly stating that each subband including a plurality of payload channels and at least one control channel. The examiner takes Official Notice that having each subband including a plurality of payload channels and at least one control channel is well known in the art. **Clark, et al** is evidence that it is at least 32 years old and not invented by applicants. Hence, it would have been very obvious, and even expected, at the time the claimed invention was made to one of ordinary skill in the art to incorporate the 32 year old and well known use of each subband including a plurality of payload channels and at least one control channel in the head end of **Thompson, et al** in order to increase bandwidth and control traffic channels.

Response to Arguments

4. Applicants' arguments filed April 4, 2005 have been fully considered but they are not persuasive.

During examination before the Patent and Trademark Office, claims must be given their broadest reasonable interpretation and limitations from the specification may not be imputed to the claims (Ex parte Akamatsu, 22 USPQ2d, 1918; In re Zletz, 13 USPQ2d 1320, In re Priest, 199 USPQ 11). Clear inference to the artisan must be considered, In re Preda, 159 USPQ 342. A prior art reference must be considered together with the knowledge of one of ordinary skill in the pertinent art, In re Samour, 197 USPQ 1. During patent examination, the pending claims must be "*given the broadest reasonable interpretation consistent with the specification.*" Claim term is not limited to single embodiment disclosed in specification, since number of embodiments disclosed does not determine meaning of the claim term, and applicant cannot overcome "*heavy presumption*" that term takes on its ordinary meaning simply by pointing to preferred embodiment (*Teleflex Inc. v. Ficosa North America Corp.*, CA FC, 6/21/02, 63 USPQ2d 1374). Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA1969). "

Applicants state that none of the reference have a head end. The examiner started to count how many time **Thompson, et al** states the term "headend". The examiner quite counting after twenty five instances.

Applicants' attorney states that there is no modem in **Thompson, et al**. Then what is a modem? To one even below ordinary skill in the art it is a MOdulator and a DEModulator. Applicants' attorney should know this. A modem inherently is a modem and a device which have a modulator and a demodulator is a modem. As evidence by applicants' admission that **Thompson, et al** does have a modulator and a demodulator.

In response to applicant's argument that the well known and very old use of each subband including a plurality of payload channels and at least one control channel, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicants' attorney argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner takes Official Notice that having each subband including a plurality of payload channels and at least one control channel is well known in the art. **Clark, et al** is evidence that it is at least 32 years old and not invented by applicants. Hence, it would have been very obvious, and even expected, at the time the claimed invention was made to one of ordinary skill in the art to incorporate the 32 year old and well known use of each subband including a plurality of payload channels and at least one control channel in the head end of **Thompson, et al** in order to increase bandwidth and control traffic channels.

In response to applicants' argument that the references fail to show certain features of applicants' invention, it is noted that the features upon which applicant relies (i.e., asynchronous data groups, clock recovery circuits, etc.) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Because of the overwhelming evidence, claims 2-12 is nowhere near in condition for allowance and such notification to that effect is DENIED.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

6. **A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.**

7. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

Certified Copies with Paper Certification

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

Certified Copies with Electronic Certification

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

Paris Convention for the Protection of Industrial Property and Priority

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at www.wipo.int/treaties/en/ip/paris/index.html.)

The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to opr@uspto.gov or by telephone at (703) 308-9743.

8. If applicants wish to request for an interview, an "*Applicant Initiated Interview Request*" form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed "*Applicant Initiated Interview Request*" form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

9. If applicants request an interview after this final rejection, prior to the interview, the intended purpose and content of the interview should be presented briefly, in writing. Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied.

10. Consolidated Appropriations Act, 2005 enacted on December 8, 2004

H.R. 4818, the Consolidated Appropriations Act, 2005 (Consolidated Appropriations Act) was signed by President George W. Bush and enacted into law on December 8, 2004. The Consolidated Appropriations Act revises certain patent application and maintenance fees; provides separate fees for a basic filing fee, a search fee, and an examination fee; and requires an additional fee for any patent application whose specification and drawings exceed 100 sheets of paper (application size fee). The new patent fees are now effective and will remain in effect during the remainder of fiscal year 2005 and during fiscal year 2006. The patent maintenance fee changes apply to any maintenance fee payment made on or after December 8, 2004, regardless of the filing or issue date of the patent for which the fee is submitted. The revised maintenance fees took effect on December 8, 2004. Thus, any maintenance fee paid at any time on (or after) December 8, 2004 is subject to the revised maintenance fee amounts set forth in the Consolidated Appropriations Act.

Note: If you are paying via the USPTO's Internet Web site, there will likely be a delay in updating the maintenance-fee information on the USPTO's Office of Finance On-Line Shopping Web page. Therefore, if paying on-line, please refer to the updated fee schedule to ensure that you include the appropriate updated fee amount. Maintenance fees must be timely paid in the appropriate amount to avoid expiration of a patent.

The new basic filing fee (or national fee), search fee, examination fee, and application size fee apply to national patent applications (other than provisional applications) filed on or after December 8, 2004, and to international patent applications in which the basic national fee is paid on or after December 8, 2004. The new provisional application filing fee applies to any provisional application filing fee paid on or after December 8, 2004. The filing fee (or national fee), search fee, and examination fee are due on filing. If the filing fee (or national fee) is paid on filing, but the search fee and/or examination fee is missing, the USPTO will issue a notice requiring that any missing search fee and examination fee (but no surcharge until further notice) be paid within a specified period of time in order to avoid abandonment. Thus, if at least the full basic filing fee under the Consolidated Appropriations Act is paid on or after December 8, 2004, the USPTO will issue a notice requiring any balance of the search fee and the examination fee (but no surcharge).

The remaining patent application fee changes, including the excess claims fees, extension of time fees, and appeal fees, apply to any fee payment made on or after December 8, 2004, regardless of the filing date of the application for which the fee is submitted.

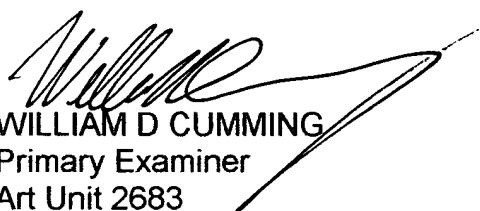
USPTO customers should monitor the USPTO's Internet Web site frequently for current patent fee information.

Payments from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM D CUMMING whose telephone number is 571-272-7861. The examiner can normally be reached on Tuesday & Wednesday, 10:30am to 8:30pm,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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